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RECEIVED JULY 18, 2008

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FLUOR

Memorandum

M4W41-SLF-08-711

To: H. Hampt E6-35 Date: July 18, 2008

From: S. L. Fitzgerald, Manager WSCF Analytical Lab *Hanford SLF*

cc: w/Attachments
T. F. Dale S3-30 J. E. Trechter S3-30
A. J. Kopriva S3-30 S. J. Trent E6-35
H. K. Meznarich S3-30 File/LB
P. D. Mix S3-30

Subject: ADDITIONAL SAMPLE ANALYSES (6010) FOR SAMPLE DELIVERY GROUP
WSCF20080561 – SAF NUMBER F08-043

Reference: (1) Memo, SL Fitzgerald to H Hampt, Final Results for SDG WSCF20080561 (M4W41-SLF-08-491), dated May 8, 2008
(2) Groundwater Protection Program-Letter of Instruction, FH-EIS-2003-MEM-001, October 31, 2002
(3) HNF-SD-CD-QAPP-017, Rev. 9, Waste Sampling & Characterization Facility Quality Assurance Plan

Compliant to your request for additional metals, Antimony, Cobalt, Manganese and Thallium data have been included in this submittal for sample delivery group WSCF20080561:

- Analytical Results (Replacement pages 16, 19, 20 and 21 of 54)

If you have any questions, don't hesitate to call on Andy Kopriva, telephone 373-1613, for assistance.

SLF/grf

Attachments
As listed

REVISED
7-18-08

JCS

M4W41-SLF-08-491

ATTACHMENT 1

COVER SHEET

Consisting of 2 pages
Including cover page

WSCF SAF NUMBER CROSS REFERENCE

Group#:	WSCF20080561		
Data Deliverable Date:	05-may-2008		
Data Deliverable:	Cover Sheet		
SAF#	Sample ID	WSCF#	Matrix
F08-043	B1TDD1 B1TDD3	W08GR00665 W08GR00663	SOIL SOIL

M4W41-SLF-08-491

ATTACHMENT 2

NARRATIVE

Consisting of 4 pages
Including cover page

Introduction

Three S&GRP samples were received at the WSCF Laboratory on March 19, 2008. Two of the samples were analyzed for the analytes indicated on the attached copy of the chain of custody (COC) form in accordance with the *Groundwater Remediation Program – Letter of Instruction*, referenced in the cover letter. Analysis of the high concentration VOAs and the associated Methanol Blank (B1TDD2) were not required.

The narrative (Attachment 2) will address sample characteristics, analyses requested and general information in performance of the analytical methods. A Data Summary Report (Attachment 3) includes analytical results, a comment report detailing method abnormalities, tentatively identified peaks if applicable, method references, and Laboratory QC information as applicable. Copies of the chain of custody and sample receipt documentation are included as Attachment 4. Additionally, a copy of the sample record sheet is included as Attachment 5.

It should be noted that the attached chain of custody was stamped "ICED" by the WSCF Laboratory Sample Custodian during sample receiving, indicating the presence of ice in the sample container.

Analytical Methodology for Requested Analyses

Refer to *WSCF Method References Report*, pages 13 through 15, for a complete listing of approved analytical methods.

Inorganic Comments

Anions – Holding time requirements for this analysis were met. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per GRP Letter of Instruction. See pages 17 through 18 for QC details. Analytical Note(s):

- Sample Duplicate, Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1TN41 (SDG# 20080591, SAF# F08-070).
- Sample results were D flagged if dilution(s) were required.
- Sample results that were less than the reportable limit, however greater than the method detection limit were B flagged.

All QC controls are within the established limits.

ICP-MS Metals – The hold time requirements for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See pages 19 through 21 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1TDC4 (SDG# 20080543, SAF# F08-043).

All QC controls are within the established limits.

Organic Comments

All organic results corrected for moisture and reported on a dry weight basis.

PCB – The hold time requirements for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GRP Letter of Instruction. See pages 27 through 28 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1TDD0 (SDG# 20080543, SAF# F08-043).

All QC controls are within the established limits.

Semi-VOA – The hold time requirements for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group per the GPP Letter of Instruction. See pages 29 through 32 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1TFC3 (SDG# 20080797, SAF# F08-066).

All QC controls are within the established limits.

TPHD-WA – The hold time requirements for this analysis were met. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. See page 33 for QC details. Analytical Note(s):

- Matrix Spike and Matrix Spike Duplicate were analyzed on sample# B1TDC4 (SDG# 20080543, SAF# F08-043).

All QC controls are within the established limits.

VOA – The holding time requirement for this analysis was not met. See comment below. A Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample, were analyzed with this delivery group per the GRP Letter of Instruction. See pages 34 through 36 for QC details. Analytical Note(s):

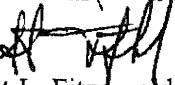
- Hold Time missed - Sample was collected in the field on March 6 and delivered to the WSCF Laboratory on March 19, 2008. Sample was analyzed on March 26, 2008.
- Analysis of the high concentration VOAs and the associated Methanol Blank (B1TDD2) were not required.

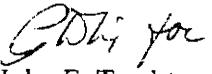
All QC controls are within the established limits.

Rad Chem – There are no hold times associated with WSCF's radiochemical methods. A Duplicate, Matrix Spike, Matrix Spike Duplicate, Blank and Laboratory Control Sample were analyzed with this delivery group. See pages 41 through 46 for QC details.

All QC controls are within the established limits.

I certify that this data package is in compliance with the LOI, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Analytical Manager and Client Services as verified by the following signatures.


Scot L. Fitzgerald
WSCF Analytical Laboratory Manager


John E. Trechter
WSCF Client Services

M4W41-SLF-08-491

ATTACHMENT 3

ANALYTICAL RESULTS

Consisting of 39 pages
Including cover page

WSCF
ANALYTICAL RESULTS REPORT
for
Groundwater Remediation Program

Richland, WA 99354

Attention: Steve Trent

Analytical: Jeff S. Fitzgerald 5/18/08

Client Services: Jeff S. Fitzgerald 5/18/08

All results are reported on an "as received" basis unless otherwise noted in the comment section.

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Information designation of this report is the responsibility of the customer.

Contract#: FH-EIS-2003-MEM-001
Report#: WSCF20080561
Report Date: 7-may-2008
Report WGPP/ver. 5.2
Groundwater Remediation Program

w13qlog v4.2 07-may-2008 07:46:45

Department: Inorganic

W13q Worklist/Batch/QC Report for Group# WSCF20080561

WL#	S#	Batch	QC#	Tray Type	Sample#	Test
				SAMPLE	W08GR00663	Percent Solids
35736	1	36140	40437	BLANK		ICP-200.8 MS All possible meta
35736	2	36140	40437	LCS		ICP-200.8 MS All possible meta
35736	4	36140	40437	MS	W08GR00628	ICP-200.8 MS All possible meta
35736	5	36140	40437	MSD	W08GR00628	ICP-200.8 MS All possible meta
35736	5	36140	40437	SPK-RPD	W08GR00628	ICP-200.8 MS All possible meta
35736	8	36140	40437	SAMPLE	W08GR00663	ICP-200.8 MS All possible meta
35875	2	36280	40566	BLANK		Anions by Ion Chromatography
35875	17	36280	40566	BLANK		Anions by Ion Chromatography
35875	3	36280	40566	LCS		Anions by Ion Chromatography
35875	11	36280	40566	SAMPLE	W08GR00663	Anions by Ion Chromatography
35875	5	36280	40566	DUP	W08GR00694	Anions by Ion Chromatography
35875	6	36280	40566	MS	W08GR00694	Anions by Ion Chromatography
35875	7	36280	40566	MSD	W08GR00694	Anions by Ion Chromatography
35875	7	36280	40566	SPK-RPD	W08GR00694	Anions by Ion Chromatography

Department: Organic

W13q Worklist/Batch/QC Report for Group# WSCF20080561

WL#	S#	Batch	QC#	Tray	Type	Sample#	Test
	40412		BLANK				PCBs complete list
	40412		LCS				PCBs complete list
	40412		MS			W08GR00632	PCBs complete list
	40412		MSD			W08GR00632	PCBs complete list
	40412		SPK-RPD			W08GR00632	PCBs complete list
	40412		SAMPLE			W08GR00663	PCBs complete list
	40412		SURR			W08GR00663	PCBs complete list
	40413		BLANK				NWTPH-D TPH Diesel Range (Wa)
	40413		LCS				NWTPH-D TPH Diesel Range (Wa)
	40413		MS			W08GR00628	NWTPH-D TPH Diesel Range (Wa)
	40413		MSD			W08GR00628	NWTPH-D TPH Diesel Range (Wa)
	40413		SPK-RPD			W08GR00628	NWTPH-D TPH Diesel Range (Wa)
	40413		SAMPLE			W08GR00663	NWTPH-D TPH Diesel Range (Wa)
	40413		SURR			W08GR00663	NWTPH-D TPH Diesel Range (Wa)
	40836		BLANK				SW-846 8270C Semi-Vols
	40836		LCS				SW-846 8270C Semi-Vols
	40836		SAMPLE			W08GR00663	SW-846 8270C Semi-Vols
	40836		SURR			W08GR00663	SW-846 8270C Semi-Vols
	40836		MS			W08GR01029	SW-846 8270C Semi-Vols
	40836		MSD			W08GR01029	SW-846 8270C Semi-Vols
	40836		SPK-RPD			W08GR01029	SW-846 8270C Semi-Vols
	40898		BLANK				VOA Ground Water Protection
	40898		LCS				VOA Ground Water Protection
	40898		MS			W08GR00665	VOA Ground Water Protection
	40898		MSD			W08GR00665	VOA Ground Water Protection
	40898		SAMPLE			W08GR00665	VOA Ground Water Protection
	40898		SPK-RPD			W08GR00665	VOA Ground Water Protection
	40898		SURR			W08GR00665	VOA Ground Water Protection

Department: Radiochemistry

W13q Worklist/Batch/QC Report for Group# WSCF20080561

WL#	S#	Batch	QC#	Tray	Type	Sample#	Test
35633	1	36039	40386	BLANK			Gamma Energy Analysis-grd H ₂ O
35633	2	36039	40386	LCS			Gamma Energy Analysis-grd H ₂ O
35633	3	36039	40386	DUP		W08GR00663	Gamma Energy Analysis-grd H ₂ O
35633	4	36039	40386	SAMPLE		W08GR00663	Gamma Energy Analysis-grd H ₂ O
35683	1	36089	40474	BLANK			Strontium 89/90
35683	2	36089	40474	LCS			Strontium 89/90
35683	3	36089	40474	DUP		W08GR00663	Strontium 89/90
35683	4	36089	40474	SAMPLE		W08GR00663	Strontium 89/90
35683	5	36089	40474	SURR		W08GR00663	Strontium 89/90
35796	1	36201	40794	BLANK			Uranium Isotopics by AEA
35796	2	36201	40794	LCS			Uranium Isotopics by AEA
35796	3	36201	40794	DUP		W08GR00663	Uranium Isotopics by AEA
35796	4	36201	40794	SAMPLE		W08GR00663	Uranium Isotopics by AEA
35796	5	36201	40794	SURR		W08GR00663	Uranium Isotopics by AEA
35835	1	36241	40799	BLANK			Plutonium Isotopics by AEA
35835	2	36241	40799	LCS			Plutonium Isotopics by AEA
35835	3	36241	40799	DUP		W08GR00663	Plutonium Isotopics by AEA
35835	4	36241	40799	SAMPLE		W08GR00663	Plutonium Isotopics by AEA
35835	5	36241	40799	SURR		W08GR00663	Plutonium Isotopics by AEA
35836	1	36242	40800	BLANK			Americium by AEA
35836	2	36242	40800	LCS			Americium by AEA
35836	3	36242	40800	DUP		W08GR00663	Americium by AEA
35836	4	36242	40800	SAMPLE		W08GR00663	Americium by AEA
35836	5	36242	40800	SURR		W08GR00663	Americium by AEA
36175	1	36592	40928	BLANK			Neptunium by AEA
36175	2	36592	40928	LCS			Neptunium by AEA
36175	3	36592	40928	DUP		W08GR00663	Neptunium by AEA
36175	5	36592	40928	MS		W08GR00663	Neptunium by AEA
36175	6	36592	40928	MSD		W08GR00663	Neptunium by AEA
36175	4	36592	40928	SAMPLE		W08GR00663	Neptunium by AEA
36175	6	36592	40928	SPK-RPD		W08GR00663	Neptunium by AEA
36175	8	36592	40928	MS		W08GR00694	Neptunium by AEA
36175	10	36592	40928	MS		W08GR00695	Neptunium by AEA

WSCF

METHOD REFERENCES REPORT

Department: Inorganic

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-505-412	LA-505-412: DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY HEATED METALS ICPMS	DETERMINATION OF TRACE ELEMENTS IN WATERS AND WASTES BY INDUCTIVELY COUPLED PLASMA - Mass Spectrometry
	HEIS RADIOSOURCES ICPMS	Inductively Coupled Plasma - Mass Spectrometry
LA-519-412	LA-519-412: TOTAL RESIDUE/% SOLIDS DRIED AT 103 - 105 C	
	EPA-600/4-79-020	160.1 Residual, Filterable
	EPA-600/4-79-020	160.3 Residue, TOTAL
	HEIS 160.1 TDS	Residual, Filterable
	Standard Methods 2540B	Total Solids Dried at 103-105 C
LA-533-410	LA-533-410: ANION ANALYSIS BY ION CHROMATOGRAPHY	DETERMINATION OF INORGANIC ANIONS BY ION CHROMATOGRAPHY
	EPA-600/R-94-111 300.0	Determination of Inorganic Anions by Ion Chromatography
	HEIS 300.0 ANIONS IC	

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at
<http://www2.rl.gov/phmc/as-dol>.

Report Date: 7-may-2008
Report #: WSCF20080561
Report WGPPM/5.2

METHOD REFERENCES REPORT

Department: Organic

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-523-427	LA-523-427: POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY EPA SW-846 3510C EPA SW-846 3545 EPA SW-846 3665A EPA SW-846 8000B EPA SW-846 8082A HEIS 8082 PCB GC	SEPARATORY FUNNEL LIQUID-LIQUID EXTRACTION PRESSURIZED FLUID EXTRACTION (PFE) SULFURIC ACID/PERMANGANATE CLEANUP DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS POLYCHLORINATED BIPHENYLS (PCBs) BY GAS CHROMATOGRAPHY Polychlorinated Biphenyls (PCBs) by Gas Chromatography
LA-523-455	LA-523-455: VOLATILE SAMPLE ANALYSIS BY SW-846 EPA SW-846 8000B EPA SW-846 8260B HEIS 8260 YOA GCMS	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS VOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS) Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry (GC/MS)
LA-523-456	LA-523-456: SEMIVOLATILE SAMPLE ANALYSIS BY SW-846, METHOD 8270C EPA SW-846 8000B EPA SW-846 8270C HEIS 8270 SYOA GCMS	DETERMINATIVE CHROMATOGRAPHIC SEPARATIONS SEMIVOLATILE ORGANIC COMPOUNDS BY GAS CHROMATOGRAPHY/MASS SPECTROMETRY (GC/MS) Semivolatile Organoc Compounds By Gas Chromatography/Mass Spectrometry (GC/MS)
LA-523-493	NWTPH-Diesel and/or Gasoline HEIS WTPH DIESEL (HEIS) WDOF TPHD	Total Petroleum Hydrocarbons in Diesel Total Petroleum Hydrocarbons in Diesel

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at
<http://www2.rl.gov/phmc/as-dol>.

WSCF

METHOD REFERENCES REPORT

Department: Radiochemistry

The results provided in this report were generated using the following WSCF Laboratory procedures. For your convenience, this table provides a listing of the regulatory or industry methods that are referenced by each of these WSCF procedures. Please note that the most recent version of the regulatory or industry method is listed here even though the WSCF procedure may reference an older version of the method. Also, a reference to a regulatory or industry method here does not necessarily indicate a verbatim implementation of that method.

LA-508-415	LA-508-415: OPERATION OF THE PROTEAN 2-INCH ALPHA/BETA COUNTING SYSTEM FOR GROSS HEIS ALPHA_GPC HEIS BETA_GPC HEIS SRTOT_SEP_PRECIP_GFrontium 89/90
LA-508-471	LA-508-471: ALPHA ENERGY ANALYZER DATA ACQUISITION AND SYSTEM CHECKOUT USING ALP HEIS PUISO_IE_PRECIP_AEA Plutonium by Alpha Energy Analysis HEIS RAISO_AEA Radium-226
LA-508-481	LA-508-481: GAMMA ENERGY ANALYSIS USING PROCOUNT SOFTWARE HEIS GAMMA_GS Gamma Emission Spectrometry

Note: A complete list of WSCF analytical procedures and referenced regulatory or industry methods is available online at
<http://www2.rl.gov/phmc/as-dol>.

Report Date: 7-May-2008
Report #: WSCE20080561
Report WGPPM/5.2

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WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
 SAF Number:F08-043
 Sample # W08GR00663
 Client ID: B1TDDD3

TRENT

WSCF

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Anions by Ion Chromatography Prep											
Anions by Ion Chromatography											
Fluoride	16984-48-8	LA-533-410	DU	<	0.300	mg/kg			50.00	0.30	04/07/08
Chloride	16887-00-6	LA-533-410	BD		3.45	mg/kg			50.00	0.030	04/07/08
Nitrogen in Nitrite	NO2-N	LA-533-410	DU	<	0.500	mg/kg			50.00	0.50	04/07/08
Nitrogen in Nitrate	NO3-N	LA-533-410	D		5.23	mg/kg			50.00	0.25	04/07/08
Sulfate	14808-79-8	LA-533-410	BD		11.4	mg/kg			50.00	3.5	04/07/08
ICP-200.8 MS All possible meta Prep											
ICP-200.8 MS All possible meta											
Manganese	7439-96-5	LA-505-412		418	mg/kg				0.97	0.100	03/27/08
Nickel	7440-02-0	LA-505-412		10.5	mg/kg				0.97	0.194	03/27/08
Silver	7440-22-4	LA-505-412	U	< 0.0969	mg/kg				0.97	0.0969	03/27/08
Antimony	7440-36-0	LA-505-412	U	< 0.291	mg/kg				0.97	0.291	03/27/08
Barium	7440-39-3	LA-505-412		98.4	mg/kg				0.97	0.194	03/27/08
Beryllium	7440-41-7	LA-505-412		0.290	mg/kg				0.97	0.0485	03/27/08
Cadmium	7440-43-9	LA-505-412	U	< 0.0969	mg/kg				0.97	0.0969	03/27/08
Chromium	7440-47-3	LA-505-412		8.53	mg/kg				0.97	0.485	03/27/08
Cobalt	7440-48-4	LA-505-412		10.5	mg/kg				0.97	0.0900	03/27/08
Copper	7440-50-8	LA-505-412		14.1	mg/kg				0.97	0.0969	03/27/08
Zinc	7440-66-6	LA-505-412		46.7	mg/kg				0.97	0.775	03/27/08
Lead	7439-92-1	LA-505-412		4.02	mg/kg				0.97	0.0969	03/27/08
Mercury	7439-97-6	LA-505-412	U	< 0.0485	mg/kg				0.97	0.0485	03/27/08
Arsenic	7440-38-2	LA-505-412		2.32	mg/kg				0.97	0.388	03/27/08
Selenium	7782-49-2	LA-505-412		0.370	mg/kg				0.97	0.291	03/27/08
Thallium	7440-28-0	LA-505-412		0.288	mg/kg				0.97	0.0970	03/27/08

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

B - The analyte < the RDL but > = the IDL/MDL (inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria.(org)

* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

REVISED
R 7-18-08

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria.(org)

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: Anions by Ion Chromatography

Sample Date: 03/19/08
 Receive Date: 03/20/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD	RPD(%)	RQ	Analysis Date
Lab ID: W08GR00694											
DUP	Fluoride	16984-48-8	<0.3		RPD	n/a	20.000	U	04/07/08		
DUP	Nitrogen in Nitrite	NO2-N	<0.5		RPD	n/a	20.000	U	04/07/08		
DUP	Nitrogen in Nitrate	NO3-N	3.388		RPD	15.779	20.000	U	04/07/08		
DUP	Sulfate	14808-79-8	14.0456		RPD	17.102	20.000	U	04/07/08		
MS	Fluoride	16984-48-8	0.483634	97.115	% Recov	75.000	125.000	U	04/07/08		
MS	Nitrogen in Nitrite	NO2-N	0.485538	97.694	% Recov	75.000	125.000	U	04/07/08		
MS	Nitrogen in Nitrate	NO3-N	0.453794	100.843	% Recov	75.000	125.000	U	04/07/08		
MS	Sulfate	14808-79-8	1.925564	97.251	% Recov	75.000	125.000	U	04/07/08		
MSD	Fluoride	16984-48-8	0.479034	96.192	% Recov	75.000	125.000	U	04/07/08		
MSD	Nitrogen in Nitrite	NO2-N	0.470814	94.731	% Recov	75.000	125.000	U	04/07/08		
MSD	Nitrogen in Nitrate	NO3-N	0.449032	99.785	% Recov	75.000	125.000	U	04/07/08		
MSD	Sulfate	14808-79-8	1.912654	96.599	% Recov	75.000	125.000	U	04/07/08		
SPK-RPD	Fluoride	16984-48-8	96.192		RPD	0.955	20.000	U	04/07/08		
SPK-RPD	Nitrogen in Nitrite	NO2-N	94.731		RPD	3.080	20.000	U	04/07/08		
SPK-RPD	Nitrogen in Nitrate	NO3-N	99.785		RPD	1.055	20.000	U	04/07/08		
SPK-RPD	Sulfate	14808-79-8	96.599		RPD	0.673	20.000	U	04/07/08		
BATCH QC											
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030	U	04/07/08		
BLANK	Fluoride	16984-48-8	<6e-3	n/a	mg/L	0.000	0.030	U	04/07/08		
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020	U	04/07/08		
BLANK	Nitrogen in Nitrite	NO2-N	<1e-2	n/a	mg/L	0.000	0.020	U	04/07/08		
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040	U	04/07/08		
BLANK	Nitrogen in Nitrate	NO3-N	<5e-3	n/a	mg/L	0.000	0.040	U	04/07/08		
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200	U	04/07/08		
BLANK	Sulfate	14808-79-8	<7e-2	n/a	mg/L	0.000	0.200	U	04/07/08		

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDC Number: WSCF20080561

Matrix: SOLID

Test: Anions by Ion Chromatography

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD	RPD(%)	RQ	Analysis Date
LCS	Fluoride	16984-48-8	104.9652	105.387	% Recov	80.000	120.000				04/07/08
LCS	Nitrogen in Nitrite	NO2-N	99.9865	100.589	% Recov	80.000	120.000				04/07/08
LCS	Nitrogen in Nitrate	NO3-N	92.3455	102.492	% Recov	80.000	120.000				04/07/08
LCS	Sulfate	14808-79-8	388.7195	98.161	% Recov	80.000	120.000				04/07/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: ICP-200.8 MS All possible meta

Sample Date: 03/04/08
 Receive Date: 03/17/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD (%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR00628											
	BATCH QC ASSOCIATED WITH SAMPLE										
MS	Silver	7440-22-4	187	93.500	% Recov	70.000	130.000	03/27/08			
MS	Arsenic	7440-38-2	187.5	93.750	% Recov	70.000	130.000	03/27/08			
MS	Barium	7440-39-3	199.25	99.625	% Recov	70.000	130.000	03/27/08			
MS	Beryllium	7440-41-7	174.19	87.095	% Recov	70.000	130.000	03/27/08			
MS	Cadmium	7440-43-9	197.4	98.700	% Recov	70.000	130.000	03/27/08			
MS	Cobalt	7440-48-4	189	94.500	% Recov	70.000	130.000	03/27/08			
MS	Chromium	7440-47-3	193.85	96.955	% Recov	70.000	130.000	03/27/08			
MS	Copper	7440-50-8	187.95	93.975	% Recov	70.000	130.000	03/27/08			
MS	Mercury	7439-97-6	2.12	106.000	% Recov	70.000	130.000	03/27/08			
MS	Manganese	7439-96-5	211	105.500	% Recov	70.000	130.000	03/27/08			
MS	Nickel	7440-02-0	192.94	96.470	% Recov	70.000	130.000	03/27/08			
MS	Lead	7439-92-1	193.4	96.700	% Recov	70.000	130.000	03/27/08			
MS	Antimony	7440-36-0	196	98.000	% Recov	70.000	130.000	03/27/08			
MS	Selenium	7782-49-2	197	98.500	% Recov	70.000	130.000	03/27/08			
MS	Thallium	7440-28-0	182	91.000	% Recov	70.000	130.000	03/27/08			
MS	Zinc	7440-66-6	201.65	100.825	% Recov	70.000	130.000	03/27/08			
MSD	Silver	7440-22-4	184.2	92.100	% Recov	70.000	130.000	03/27/08			
MSD	Arsenic	7440-38-2	187.7	93.850	% Recov	70.000	130.000	03/27/08			
MSD	Barium	7440-39-3	192.55	96.275	% Recov	70.000	130.000	03/27/08			
MSD	Beryllium	7440-41-7	173.99	86.995	% Recov	70.000	130.000	03/27/08			
MSD	Cadmium	7440-43-9	198.9	99.450	% Recov	70.000	130.000	03/27/08			
MSD	Cobalt	7440-48-4	188	94.000	% Recov	70.000	130.000	03/27/08			
MSD	Chromium	7440-47-3	194.55	97.275	% Recov	70.000	130.000	03/27/08			
MSD	Copper	7440-50-8	186.25	93.125	% Recov	70.000	130.000	03/27/08			
MSD	Mercury	7439-97-6	2	100.000	% Recov	70.000	130.000	03/27/08			
MSD	Manganese	7439-96-5	203	101.500	% Recov	70.000	130.000	03/27/08			

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7-18-08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: ICP-200.8 MS All possible meta

Sample Date: 03/04/08
 Receive Date: 03/17/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD %	RPD %	RQ	Analysis Date
MSD	Nickel	7440-02-0	190.94	95.470	% Recov	70.000	130.000				03/27/08
MSD	Lead	7439-52-1	192.1	96.050	% Recov	70.000	130.000				03/27/08
MSD	Antimony	7440-36-0	192	96.000	% Recov	75.000	125.000				03/27/08
MSD	Selenium	7782-49-2	194.8	97.400	% Recov	70.000	130.000				03/27/08
MSD	Thallium	7440-28-0	182	91.000	% Recov	70.000	130.000				03/27/08
MSD	Zinc	7440-66-6	191.45	95.725	% Recov	70.000	130.000				03/27/08
SPK-RPD	Silver	7440-22-4	92.100	RPD	RPD	1.509	20.000				03/27/08
SPK-RPD	Arsenic	7440-38-2	93.850	RPD	RPD	0.107	20.000				03/27/08
SPK-RPD	Barium	7440-39-3	96.275	RPD	RPD	3.420	20.000				03/27/08
SPK-RPD	Beryllium	7440-41-7	86.995	RPD	RPD	0.115	20.000				03/27/08
SPK-RPD	Cadmium	7440-43-9	99.450	RPD	RPD	0.757	20.000				03/27/08
SPK-RPD	Cobalt	7440-48-4	94.000	RPD	RPD	0.531	20.000				03/27/08
SPK-RPD	Chromium	7440-47-3	97.275	RPD	RPD	0.360	20.000				03/27/08
SPK-RPD	Copper	7440-50-8	93.125	RPD	RPD	0.909	20.000				03/27/08
SPK-RPD	Mercury	7439-97-6	100.000	RPD	RPD	5.825	20.000				03/27/08
SPK-RPD	Manganese	7439-96-5	101.500	RPD	RPD	3.865	20.000				03/27/08
SPK-RPD	Nickel	7440-02-0	95.470	RPD	RPD	1.042	20.000				03/27/08
SPK-RPD	Lead	7439-92-1	96.050	RPD	RPD	0.674	20.000				03/27/08
SPK-RPD	Antimony	7440-36-0	96.0	RPD	RPD	4.147	20.000				03/27/08
SPK-RPD	Selenium	7782-49-2	97.400	RPD	RPD	1.123	20.000				03/27/08
SPK-RPD	Thallium	7440-28-0	91.000	RPD	RPD	0.000	20.000				03/27/08
SPK-RPD	Zinc	7440-66-6	95.725	RPD	RPD	5.190	20.000				03/27/08
BATCH QC											
BLANK	Silver	7440-22-4	<0.1	n/a	ug/L						03/27/08
BLANK	Arsenic	7440-38-2	<0.4	n/a	ug/L						03/27/08
BLANK	Barium	7440-39-3	<0.2	n/a	ug/L						03/27/08
BLANK	Beryllium	7440-41-7	<5e-2	n/a	ug/L						03/27/08
BLANK	Cadmium	7440-43-9	<0.1	n/a	ug/L						03/27/08
BLANK	Cobalt	7440-48-4	<5e-2	n/a	ug/L						03/27/08

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WSCF ANALYTICAL LABORATORY QC REPORT

Department: Inorganic

SDG Number: WSCF20080561

Matrix: SOLID

Test: ICP-200.8 MS All possible meta

Sample Date:
Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
BLANK	Chromium	7440-47-3	<0.5	n/a	ug/L					U	03/27/08
BLANK	Copper	7440-50-8	<0.1	n/a	ug/L					U	03/27/08
BLANK	Mercury	7439-97-6	<5e-2	n/a	ug/L					U	03/27/08
BLANK	Manganese	7439-96-5	<0.1	n/a	ug/L					U	03/27/08
BLANK	Nickel	7440-02-0	<0.2	n/a	ug/L					U	03/27/08
BLANK	Lead	7439-92-1	<0.1	n/a	ug/L					U	03/27/08
BLANK	Antimony	7440-36-0	<0.3	n/a	ug/L					U	03/27/08
BLANK	Selenium	7782-49-2	<0.3	n/a	ug/L					U	03/27/08
BLANK	Thallium	7440-28-0	<0.1	n/a	ug/L					U	03/27/08
BLANK	Zinc	7440-66-6	<0.8	n/a	ug/L					U	03/27/08
LCS	Silver	7440-22-4	106.9	105.842	% Recov	98.000	134.000			03/27/08	
LCS	Arsenic	7440-38-2	136.4	103.333	% Recov	75.000	134.000			03/27/08	
LCS	Barium	7440-39-3	320.4	100.439	% Recov	87.000	121.000			03/27/08	
LCS	Beryllium	7440-41-7	84.38	94.279	% Recov	70.000	153.000			03/27/08	
LCS	Cadmium	7440-43-9	74.93	112.677	% Recov	95.000	124.000			03/27/08	
LCS	Cobalt	7440-48-4	78.57	107.483	% Recov	88.000	119.000			03/27/08	
LCS	Chromium	7440-47-3	73.15	100.343	% Recov	77.000	125.000			03/27/08	
LCS	Copper	7440-50-8	71.79	104.803	% Recov	84.000	122.000			03/27/08	
LCS	Mercury	7439-97-6	7.72	93.237	% Recov	71.000	132.000			03/27/08	
LCS	Manganese	7439-96-5	470.4	103.841	% Recov	83.000	118.000			03/27/08	
LCS	Nickel	7440-02-0	60.19	108.255	% Recov	90.000	121.000			03/27/08	
LCS	Lead	7439-92-1	135.2	104.000	% Recov	92.000	123.000			03/27/08	
LCS	Antimony	7440-36-0	131.1	145.344	% Recov	114.000	260.000			03/27/08	
LCS	Selenium	7782-49-2	181	112.422	% Recov	52.000	157.000			03/27/08	
LCS	Thallium	7440-28-0	134	100.752	% Recov	92.000	123.000			03/27/08	
LCS	Zinc	7440-66-6	209.5	118.362	% Recov	85.000	130.000			03/27/08	

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R7-18-08

WSCF

ANALYTICAL RESULTS REPORT

Attention:	Steve Trent	Group #:	WSCF20080561
SAF Number:	F08-043	Department:	Organic
Sample #:	W08GR00663	Sampled:	03/06/08
Client ID:	B1TDD3	Received:	03/19/08
	TRENT	Matrix:	SOIL
Test Performed	CAS #	Method	RQ
NWTPH-D TPH Diesel Range (Wa) Prep			
NWTPH-D TPH Diesel Range (Wa)			
Total Pet. Hydrocarbons Diesel	TPHDIESEL	LA-523-493	U
Kerosene	TPHKEROSENE	LA-523-493	U
PCBs complete list Prep			
PCBs complete list			
Aroclor-1016	12674-11-2	LA-523-427	U
Aroclor-1221	11104-28-2	LA-523-427	U
Aroclor-1232	11141-16-5	LA-523-427	U
Aroclor 1242	53469-21-9	LA-523-427	U
Aroclor-1248	12672-29-6	LA-523-427	U
Aroclor-1254	11097-69-1	LA-523-427	U
Aroclor-1260	11096-82-5	LA-523-427	U
Aroclor-1262	37324-23-5	LA-523-427	U
Aroclor-1268	11100-14-4	LA-523-427	U
SW-846 8270C Semi-Vols Prep			
SW-846 8270C Semi-Vols			
4-Nitrophenol	100-02-7	LA-523-456	U
1,4-Dichlorobenzene	106-46-7	LA-523-456	U
Phenol	108-95-2	LA-523-456	U
1,2,4-Trichlorobenzene	120-82-1	LA-523-456	U
2,4-Dinitrotoluene	121-14-2	LA-523-456	U
Pyrene	129-00-0	LA-523-456	U
4-Chloro-3-methylphenol	59-50-7	LA-523-456	U
N,N-tetra-di-n-propylamine	621-64-7	LA-523-456	U

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2
Groundwater Remediation Program

B - The analyte < the RDL but > = the IDL/MDL (inorg)

U - Analyzed for but not detected above limiting criteria (inorg)

D - Analyte was identified at a secondary dilution factor (inorg)

U - Analyzed for but not detected above limiting criteria (org)

WSCF

ANALYTICAL RESULTS REPORT

Attention:

 Steve Trent
 S&A F Number: F08-043

 Sample # W08GR00663
 Client ID: BITDD3

TRENT

WSCF

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Acenaphthene	83-32-9	LA-523-456	U	<	150	ug/kg		1.00	1.5e+02		04/28/08
Pentachlorophenol	87-86-5	LA-523-456	U	<	210	ug/kg		1.00	2.1e+02		04/28/08
2-Chlorophenol	95-57-8	LA-523-456	U	<	150	ug/kg		1.00	1.5e+02		04/28/08
Tributyl phosphate	126-73-8	LA-523-456	U	<	150	ug/kg		1.00	1.5e+02		04/28/08
1,2,4-Trimethylbenzene	95-63-6	LA-523-456	U	<	190	ug/kg		1.00	1.9e+02		04/28/08

MDL = Minimum Detection Limit

8 - The analyte < the RDL but >= the IDL/MDL (inorg)

RQ = Result Qualifier

U - Analyzed for but not detected above limiting criteria (inorg)

TP Err = Total Propagated Error
DF = Dilution Factor

* - Indicates results that have NOT been validated:

Report WGPP/ver. 5.2

Groundwater Remediation Program

D = Analyte was identified at a secondary dilution factor (inorg)
U = Analyzed for but not detected above limiting criteria (inorg)

+ - Indicates more than six qualifier symbols

D = Analyte was identified at a secondary dilution factor (inorg)
U = Analyzed for but not detected above limiting criteria (inorg)

WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number:F08-043
Sample # W08GR00665
Client ID: B1TDD1 **TRENT**
WSCF

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
VOA Ground Water Protection											
1,1-Dichloroethene	75-35-4	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Trichloroethene	79-01-6	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Benzene	71-43-2	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Toluene	108-88-3	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Chlorobenzene	108-90-7	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
1,1-Dichloroethane	75-34-3	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Ethylbenzene	100-41-4	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Styrene	100-42-5	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
cis-1,3-Dichloropropene	10061-01-5	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
trans-1,3-Dichloropropene	10061-02-6	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
1,2-Dichloroethane	107-08-2	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
4-Methyl-2-Pentanone	108-10-1	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Dibromochloromethane	124-48-1	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Tetrachloroethene	127-18-4	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Xylenes (total)	1330-20-7	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
1,2-Dichloroethene Total	540-59-0	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Carbon tetrachloride	56-23-5	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
2-Hexanone	591-78-6	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Acetone	67-64-1	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Chloroform	67-66-3	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
1,1,1-Trichloroethane	71-55-6	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Bromoethane	74-83-9	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Chloroethane	74-87-3	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Chloroethane	75-00-3	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08

MDL = Minimum Detection Limit

RQ = Result Qualifier

TP Err=Total Propagated Error

DF=Dilution Factor

* - Indicates results that have NOT been validated;

+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

B - The analyte < the RDL but > = the MDL/MDL (inorg)

U - Analyzed for but not detected above limiting criteria.(org)

D - Analyte was identified at a secondary dilution factor(morg)

U - Analyzed for but not detected above limiting criteria.(org)

WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent
SAF Number:F08-043
Sample # W08GR00665
Client ID: BITDDI **TRENT**

Test Performed	CAS #	Method	RQ	Result	Unit	TP Err	Unit	DF	MDL	PQL	Analysis Date
Vinyl chloride	75-01-4	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Methylenechloride	75-09-2	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Carbon disulfide	75-15-0	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Bromoform	75-25-2	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Bromodichloromethane	75-27-4	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
1,2-Dichloropropane	78-87-5	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
2-Butanone	78-93-3	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
1,1,2-Trichloroethane	79-00-5	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
1,1,2,2-Tetrachloroethane	79-34-5	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Hexane	110-54-3	LA-523-455	U	< 0.920	ug/kg			1.00	0.92		03/26/08
Tetrahydrofuran	109-99-9	LA-523-455	U	< 1.80	ug/kg			1.00	1.8		03/26/08
Acetonitrile	75-05-8	LA-523-455	U	< 1.80	ug/kg			1.00	1.8		03/26/08

MDL = Minimum Detection Limit**RQ = Result Qualifier****TP Err = Total Propagated Error****DF = Dilution Factor**

* - Indicates results that have NOT been validated;
+ - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2
Groundwater Remediation Program

B - The analyte < the RDL but > = the (DL/MDL) (inorg)**U - Analyzed for but not detected above limiting criteria(inorg)****D - Analyte was identified at a secondary dilution factor(inorg)****U - Analyzed for but not detected above limiting criteria(org)**

WSCF

TENTATIVELY IDENTIFIED PEAK REPORT

Sample #	Client ID	Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W08GR00663	B1TDD3	TRENT	SW-846 82 70C Semi-Vols	13-547 Di-n-butylphthalate	84-74-2		13.54793	1.9e + 02 ug/kg
W08GR00665	B1TDO1	TRENT	VOA Ground Water Protection	SMP 6.985 Unknown	Unknown		6.985983	J 27 ug/kg

RQ=Result Qualifier

J - Analyte < lowest calibration but >= MDL (org)

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Groundwater Remediation Program
WGPR v 5.2 Report# WSCF20080561

Report Date: 7-may-2008

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WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: PCBs complete list

Sample Date: 03/05/08
 Receive Date: 03/17/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD	RPD(%)	RQ	Analysis Date
Lab ID: W08GR00632											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	Aroclor-1260	11096-82-5	269.09	124.000	% Recov	75.000	125.000	03/25/08			
MS	Decachlorobiphenyl	2051-24-3	949.18	109.000	% Recov	50.000	150.000	03/25/08			
MS	Tetrachloro-m-xylene	877-09-8	906.21	104.000	% Recov	50.000	150.000	03/25/08			
MSD	Aroclor-1260	11096-82-5	249.17	117.000	% Recov	75.000	125.000	03/25/08			
MSD	Decachlorobiphenyl	2051-24-3	452.72	106.000	% Recov	50.000	150.000	03/25/08			
MSO	Tetrachloro-m-xylene	877-09-8	449.46	105.000	% Recov	50.000	150.000	03/25/08			
SPK-RPD	Aroclor-1260	11096-82-5	117.000	RPD	RPD	5.809	25.000	03/25/08			
SPK-RPD	Decachlorobiphenyl	2051-24-3	106.000	RPD	RPD	2.791	20.000	03/25/08			
SPK-RPD	Tetrachloro-m-xylene	877-09-8	105.000	RPD	RPD	0.957	20.000	03/25/08			
Lab ID: W08GR00663											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	Decachlorobiphenyl	2051-24-3	435.00	104.000	% Recov	50.000	150.000	03/25/08			
SURR	Tetrachloro-m-xylene	877-09-8	426.86	102.000	% Recov	50.000	150.000	03/25/08			
BATCH QC											
BLANK	Aroclor-1016	12674-11-2	< 10	n/a	UGKG			03/25/08			
BLANK	Aroclor-1221	11104-28-2	< 20	n/a	ug/kg			03/25/08			
BLANK	Aroclor-1232	11141-16-5	< 10	n/a	ug/kg			03/25/08			
BLANK	Aroclor-1242	53469-21-9	< 10	n/a	ug/kg			03/25/08			
BLANK	Aroclor-1248	12672-29-6	< 10	n/a	ug/kg			03/25/08			
BLANK	Aroclor-1254	11097-69-1	< 10	n/a	ug/kg			03/25/08			
BLANK	Aroclor-1260	11096-82-5	< 10	n/a	ug/kg			03/25/08			
BLANK	Aroclor-1262	37324-23-5	< 10	n/a	ug/kg			03/25/08			
BLANK	Aroclor-1268	11100-14-4	< 10	n/a	ug/kg			03/25/08			
BLANK	Decachlorobiphenyl	2051-24-3	377.09	94.300	% Recov	50.000	150.000	03/25/08			

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20080561

Matrix: SOLID

Test: PCBs complete list

Sample Date:
Receive Date:

QC Type	Analytic	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD	RPD(%)	RQ	Analysis Date
BLANK	Tetrachloro-m-xylene	877-09-8	369.27	92.300	% Recov	50.000	150.000				03/25/08
LCS	Aroclor 1260	11096-82-5	217.13	109.000	% Recov	70.000	130.000				03/25/08
LCS	Decachlorobiphenyl	2051-24-3	388.67	97.200	% Recov	50.000	150.000				03/25/08
LCS	Tetrachloro-m-xylene	877-09-8	371.22	92.800	% Recov	50.000	150.000				03/25/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: SW-846 8270C Semi-Vols

Sample Date: 03/06/08
 Receive Date: 03/19/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD	RPD(%)	Limit	RQ	Analysis Date
Lab ID: W08GR00663												
SURR	2-Fluorobiphenyl(Surr)	321-60-8	4279.8	102.000	% Recov	66.000	122.000	04/28/08	04/28/08			
SURR	Nitrobenzene-d5(Surr)	4165-60-0	4254.7	101.000	% Recov	63.000	125.000	04/28/08	04/28/08			
SURR	Pheno-d5(Surr)	4165-62-2	4133.5	98.300	% Recov	66.000	124.000	04/28/08	04/28/08			
SURR	2,4,6-Tribromophenol(Surr)	118-79-6	3819.0	90.800	% Recov	49.000	120.000	04/28/08	04/28/08			
SURR	Terphenyl-d14(Surr)	98904-43-9	4590.6	109.000	% Recov	58.000	128.000	04/28/08	04/28/08			
Lab ID: W08GR01029												
BATCH QC ASSOCIATED WITH SAMPLE												
MS	1,2,4-Trichlorobenzene	120-82-1	4124.0	91.500	% Recov	75.000	121.000	04/28/08	04/28/08			
MS	1,4-Dichlorobenzene	106-46-7	4060.5	90.100	% Recov	68.000	121.000	04/28/08	04/28/08			
MS	2,4-Dinitrotoluene	121-14-2	3675.8	81.600	% Recov	66.000	113.000	04/28/08	04/28/08			
MS	Acenaphthene	83-32-9	3942.9	87.500	% Recov	69.000	125.000	04/28/08	04/28/08			
MS	4-Chloro-3-methylphenol	59-50-7	6115.7	90.500	% Recov	68.000	116.000	04/28/08	04/28/08			
MS	2-Chlorophenol	95-57-8	6212.5	91.900	% Recov	65.000	124.000	04/28/08	04/28/08			
MS	N-Nitrosodi-n-propylamine	621-64-7	4139.7	91.900	% Recov	69.000	127.000	04/28/08	04/28/08			
MS	2-Fluorobiphenyl(Surr)	321-60-8	3761.7	83.500	% Recov	66.000	122.000	04/28/08	04/28/08			
MS	Phenol	108-95-2	6112.9	90.400	% Recov	71.000	122.000	04/28/08	04/28/08			
MS	Nitrobenzene-d5(Surr)	4165-60-0	3935.1	87.300	% Recov	63.000	125.000	04/28/08	04/28/08			
MS	4-Nitrophenol	100-02-7	5027.0	74.400	% Recov	55.000	113.000	04/28/08	04/28/08			
MS	Pentachlorophenol	87-86-5	6481.6	95.900	% Recov	50.000	113.000	04/28/08	04/28/08			
MS	Pheno-d5(Surr)	4165-62-2	3872.1	85.900	% Recov	66.000	124.000	04/28/08	04/28/08			
MS	Pyrene	129-00-0	4841.2	107.000	% Recov	67.000	125.000	04/28/08	04/28/08			
MS	2,4,6-Tribromophenol(Surr)	118-79-6	4229.2	93.900	% Recov	49.000	120.000	04/28/08	04/28/08			
MS	Terphenyl-d14(Surr)	98904-43-9	4782.9	108.000	% Recov	58.000	128.000	04/28/08	04/28/08			
MSD	1,2,4-Trichlorobenzene	120-82-1	4543.7	101.000	% Recov	75.000	121.000					
MSD	1,4-Dichlorobenzene	106-46-7	4810.2	107.000	% Recov	68.000	121.000					

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: SW-846 8270C Semi-Vols

Sample Date: 04/03/08
 Receive Date: 04/15/08

QC	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD	RPD(%)	RQ	Analysis Date
MSD	2,4-Dinitrotoluene	121-14-2	4290.7	95.300	% Recov	66.000	113.000				04/28/08
MSD	Acenaphthene	83-32-9	4498.6	99.900	% Recov	69.000	125.000				04/28/08
MSD	4-Chloro-3-methylphenol	59-50-7	6881.6	102.000	% Recov	68.000	116.000				04/28/08
MSD	2-Chlorophenol	95-57-8	7138.8	106.000	% Recov	65.000	124.000				04/28/08
MSD	N-Nitrosoct-n-dipropylamine	621-64-7	4979.2	111.000	% Recov	69.000	127.000				04/28/08
MSD	2,Fluorobiphenyl(Surr)	321-60-8	4236.1	94.100	% Recov	66.000	122.000				04/28/08
MSD	Phenol	108-95-2	7096.6	105.000	% Recov	71.000	122.000				04/28/08
MSD	Nitrobenzene-d5(Surr)	4165-60-0	4396.1	97.600	% Recov	63.000	125.000				04/28/08
MSD	4-Nitrophenol	100-02-7	5824.7	86.200	% Recov	55.000	113.000				04/28/08
MSD	Pentachlorophenol	87-86-5	6102.3	90.300	% Recov	50.000	113.000				04/28/08
MSD	Phenol-d5(Surr)	4165-62-2	4599.4	102.000	% Recov	66.000	124.000				04/28/08
MSD	Pyrene	129-00-0	4986.9	111.000	% Recov	67.000	125.000				04/28/08
MSD	2,4,6-Tribromophenol(Surr)	118-79-6	4152.4	92.200	% Recov	49.000	120.000				04/28/08
MSD	Terphenyl-d14(Surr)	98904-43-9	4671.5	104.000	% Recov	58.000	128.000				04/28/08
SPK-RPD	1,2,4-Trichlorobenzene	120-82-1	101.000		RPD			9.870	20.000		04/28/08
SPK-RPD	1,4-Dichlorobenzene	106-46-7	107.000		RPD			17.149	20.000		04/28/08
SPK-RPD	2,4-Dinitrotoluene	121-14-2	95.300		RPD			15.489	20.000		04/28/08
SPK-RPD	Acenaphthene	83-32-9	99.900		RPD			13.234	20.000		04/28/08
SPK-RPD	4-Chloro-3-methylphenol	59-50-7	102.000		RPD			11.948	20.000		04/28/08
SPK-RPD	2-Chlorophenol	95-57-8	106.000		RPD			14.250	20.000		04/28/08
SPK-RPD	N-Nitrosoct-n-dipropylamine	621-64-7	111.000		RPD			18.827	20.000		04/28/08
SPK-RPD	2-Fluorobiphenyl(Surr)	321-60-8	94.100		RPD			11.937	20.000		04/28/08
SPK-RPD	Phenol	108-95-2	105.000		RPD			14.944	20.000		04/28/08
SPK-RPD	Nitrobenzene-d5(Surr)	4165-60-0	97.600		RPD			11.141	20.000		04/28/08
SPK-RPD	4-Nitrophenol	100-02-7	86.200		RPD			14.695	20.000		04/28/08
SPK-RPD	Pentachlorophenol	87-86-5	90.300		RPD			6.015	20.000		04/28/08
SPK-RPD	Phenol-d5(Surr)	4165-62-2	102.000		RPD			17.137	20.000		04/28/08
SPK-RPD	Pyrene	129-00-0	111.000		RPD			3.670	20.000		04/28/08
SPK-RPD	2,4,6-Tribromophenol(Surr)	118-79-6	92.200		RPD			1.827	20.000		04/28/08
SPK-RPD	Terphenyl-d14(Surr)	98904-43-9	104.000		RPD			1.905	20.000		04/28/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: SW-846 8270C Semi-Vols

Sample Date: 04/03/08
 Receive Date: 04/15/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD (%)	RQ	Analysis Date
BATCH QC											
BLANK	1,2,4-Trichlorobenzene	120-82-1	< 140	n/a	ug/Kg					u	04/28/08
BLANK	1,4-Dichlorobenzene	106-46-7	< 240	n/a	ug/Kg					u	04/28/08
BLANK	2,4-Dinitrotoluene	121-14-2	< 140	n/a	ug/Kg					u	04/28/08
BLANK	Acenaphthene	83-32-9	< 140	n/a	ug/Kg					u	04/28/08
BLANK	4-Chloro-3-methylphenol	59-50-7	< 140	n/a	ug/Kg					u	04/28/08
BLANK	2-Chlorophenol	95-57-8	< 140	n/a	ug/Kg					u	04/28/08
BLANK	N-Nitrosodi-n-dipropylamine	621-64-7	< 140	n/a	ug/Kg					u	04/28/08
BLANK	2-Fluorobiphenyl(Surr)	321-60-8	3506.8	87.700	% Recov	66.000	122.000			u	04/28/08
BLANK	Phenol	108-95-2	< 140	n/a	ug/Kg					u	04/28/08
BLANK	Nitrobenzene-d5(Surr)	4165-60-0	3466.7	86.700	% Recov	63.000	125.000			u	04/28/08
BLANK	4-Nitrophenol	100-02-7	< 200	n/a	ug/Kg					u	04/28/08
BLANK	Pentachlorophenol	87-88-5	< 200	n/a	ug/Kg					u	04/28/08
BLANK	Phenol-d5(Surr)	4165-62-2	3574.5	89.400	% Recov	66.000	124.000			u	04/28/08
BLANK	Pyrene	129-00-0	< 140	n/a	ug/Kg					u	04/28/08
BLANK	Tributyl phosphate	126-73-8	< 140	n/a	ug/Kg					u	04/28/08
BLANK	2,4,6-Tribromophenol(Surr)	118-79-6	2872.0	71.800	% Recov	49.000	120.000			u	04/28/08
BLANK	Terphenyl-d4(Surr)	98904-43-9	4144.8	104.030	% Recov	58.000	128.000			u	04/28/08
LCS	1,2,4-Trichlorobenzene	120-82-1	3980.2	99.500	% Recov	76.000	118.000			u	04/28/08
LCS	1,4-Dichlorobenzene	106-46-7	4023.1	101.000	% Recov	68.000	121.000			u	04/28/08
LCS	2,4-Dinitrotoluene	121-14-2	3695.0	92.400	% Recov	68.000	112.000			u	04/28/08
LCS	Acenaphthene	83-32-9	3927.0	98.200	% Recov	75.000	121.000			u	04/28/08
LCS	4-Chloro-3-methylphenol	59-50-7	5677.5	94.600	% Recov	68.000	117.000			u	04/28/08
LCS	2-Chlorophenol	95-57-8	6032.7	101.000	% Recov	84.000	114.000			u	04/28/08
LCS	N-Nitrosodi-n-dipropylamine	621-64-7	4252.6	106.000	% Recov	76.000	119.000			u	04/28/08
LCS	2-Fluorobiphenyl(Surr)	321-60-8	3983.4	99.600	% Recov	58.000	109.000			u	04/28/08
LCS	Phenol	108-95-2	6007.3	100.000	% Recov	80.000	113.000			u	04/28/08
LCS	Nitrobenzene-d5(Surr)	4165-60-0	3826.2	95.700	% Recov	60.000	118.000			u	04/28/08
LCS	4-Nitrophenol	100-02-7	5282.2	88.000	% Recov	42.000	123.000			u	04/28/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: SW-846 8270C Semi-Vols

Sample Date:
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD	RPD(%)	RQ	Analysis Date
LCS	Pentachlorophenol	87-86-5	5809.2	96.800	% Recov	55.000	120.000				04/28/08
LCS	Phenol-d5(Surr)	4165-62-2	4005.7	100.000	% Recov	59.000	116.000				04/28/08
LCS	Pyrene	129-00-0	4073.3	102.000	% Recov	67.000	122.000				04/28/08
LCS	2,4,6-Tribromopheno(Surr)	118-79-6	3818.9	95.500	% Recov	60.000	120.000				04/28/08
LCS	Terphenyl-d4(Surr)	98904-43-9	3980.8	99.500	% Recov	60.000	120.000				04/28/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: NWTPH-D TPH Diesel Range (Wa)

Sample Date: 03/04/08
 Receive Date: 03/17/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD	RPD(%)	RQ	Analysis Date
Lab ID: W08GR00628											
BATCH QC ASSOCIATED WITH SAMPLE											
MS	ortho-Terphenyl	Surr	84-15-1	19406	93.700	% Recov	70.000	130.000			03/25/08
MS	Total Pet. Hydrocarbons Diesel	TPHDIESEL		102980	99.400	% Recov	75.000	125.000			03/25/08
MSD	ortho-Terphenyl	Surr	84-15-1	16380	78.900	% Recov	70.000	130.000			03/25/08
MSD	Total Pet. Hydrocarbons Diesel	TPHDIESEL		97130	93.600	% Recov	75.000	125.000			03/25/08
SPK-RPD	ortho-Terphenyl	Surr	84-15-1	78.900	RPD		17.149	20.000			03/25/08
SPK-RPD	Total Pet. Hydrocarbons Diesel	TPHDIESEL		93.600	RPD		6.010	20.000			03/25/08
Lab ID: W08GR00663											
BATCH QC ASSOCIATED WITH SAMPLE											
SURR	ortho-Terphenyl	Surr	84-15-1	17804	82.600	% Recov	70.000	130.000			03/25/08
BATCH QC											
BLANK	Kerosene	TPHKEROSENE	< 3000	n/a	ug/Kg					U	03/25/08
BLANK	ortho-Terphenyl	Surr	84-15-1	16514	82.600	% Recov	70.000	130.000			03/25/08
BLANK	Total Pet. Hydrocarbons Diesel	TPHDIESEL	< 3000	n/a	ug/Kg					U	03/25/08
LCS	ortho-Terphenyl	Surr	84-15-1	15505	77.500	% Recov	70.000	130.000			03/25/08
LCS	Total Pet. Hydrocarbons Diesel	TPHDIESEL		88868	88.900	% Recov	80.000	120.000			03/25/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: VOA Ground Water Protection

Sample Date: 03/06/08
 Receive Date: 03/19/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD	RPD(%)	RQ	Analysis Date
Lab ID: W08GR00665											
MS	1,1-Dichloroethane	75-35-4	28.970	106.000	% Recov	63.000	117.000				03/26/08
MS	Benzene	71-43-2	29.000	106.000	% Recov	75.000	129.000				03/26/08
MS	4-Bromofluorobenzene(Surr)	460-00-4	56.560	103.000	% Recov	75.000	125.000				03/26/08
MS	Chlorobenzene	108-90-7	27.750	101.000	% Recov	79.000	119.000				03/26/08
MS	1,2-Dichloroethane-d4(Surr)	17060-07-0	63.030	115.000	% Recov	75.000	125.000				03/26/08
MS	Toluene-d8(Surr)	2037-26-5	57.390	105.000	% Recov	75.000	125.000				03/26/08
MS	Toluene	108-88-3	29.060	106.000	% Recov	76.000	120.000				03/26/08
MS	Trichloroethene	79-01-6	24.140	88.000	% Recov	73.000	123.000				03/26/08
MSD	1,1-Dichloroethene	75-35-4	25.560	108.000	% Recov	63.000	117.000				03/26/08
MSD	Benzene	71-43-2	25.720	108.000	% Recov	75.000	129.000				03/26/08
MSD	4-Bromofluorobenzene(Surr)	460-00-4	48.640	103.000	% Recov	75.000	125.000				03/26/08
MSD	Chlorobenzene	108-90-7	24.870	106.000	% Recov	79.000	119.000				03/26/08
MSD	1,2-Dichloroethane-d4(Surr)	17060-07-0	53.010	113.000	% Recov	75.000	125.000				03/26/08
MSD	Toluene-d8(Surr)	2037-26-5	48.340	103.000	% Recov	75.000	125.000				03/26/08
MSD	Toluene	108-88-3	25.330	108.000	% Recov	76.000	120.000				03/26/08
MSD	Trichloroethene	79-01-6	21.210	90.200	% Recov	73.000	123.000				03/26/08
SPK-RPD	1,1-Dichloroethene	75-35-4	109.000	RPD	2.791	20.000					03/26/08
SPK-RPD	Benzene	71-43-2	109.000	RPD	2.791	20.000					03/26/08
SPK-RPD	4-Bromofluorobenzene(Surr)	460-00-4	103.000	RPD	0.000	20.000					03/26/08
SPK-RPD	Chlorobenzene	108-90-7	106.000	RPD	4.831	20.000					03/26/08
SPK-RPD	1,2-Dichloroethane-d4(Surr)	17060-07-0	113.000	RPD	1.754	20.000					03/26/08
SPK-RPD	Toluene-d8(Surr)	2037-26-5	103.000	RPD	1.923	20.000					03/26/08
SPK-RPD	Toluene	108-88-3	108.000	RPD	1.869	20.000					03/26/08
SPK-RPD	Trichloroethene	79-01-6	90.200	RPD	2.469	20.000					03/26/08
SURR	4-Bromofluorobenzene(Surr)	460-00-4	48.400	105.000	% Recov	75.000	125.000				03/26/08
SURR	1,2-Dichloroethane-d4(Surr)	17060-07-0	54.420	118.000	% Recov	75.000	125.000				03/26/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: VOA Ground Water Protection

Sample Date: 03/06/08
 Receive Date: 03/19/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD	RPD(%)	RQ	Analysis Date
SURR	Toluene-d8(Surr)	2037-26-5	47.930	104.000	% Recov	80.000	126.000				03/26/08
BATCH QC											
BLANK	1,1-Dichloroethane	75-34-3	< 1.0	n/a	ug/Kg						03/26/08
BLANK	1,1,1-Trichloroethane	71-55-6	< 1.0	n/a	ug/Kg						03/26/08
BLANK	1,1,2-Trichloroethane	79-00-5	< 1.0	n/a	ug/Kg						03/26/08
BLANK	1,1,2,2-Tetrachloroethane	79-34-5	< 1.0	n/a	ug/Kg						03/26/08
BLANK	1,1-Dichloroethene	75-35-4	< 1.0	n/a	ug/Kg						03/26/08
BLANK	1,2-Dichloroethane	107-06-2	< 1.0	n/a	ug/Kg						03/26/08
BLANK	1,2-Dichloroethene(Total)	540-59-0	< 1.0	n/a	ug/Kg						03/26/08
BLANK	2-Hexanone	591-78-6	< 1.0	n/a	ug/Kg						03/26/08
BLANK	4-Methyl-2-Pentanone	108-10-1	< 1.0	n/a	ug/Kg						03/26/08
BLANK	Acetone	67-64-1	< 1.0	n/a	ug/Kg						03/26/08
BLANK	Bromodichloromethane	75-27-4	< 1.0	n/a	ug/Kg						03/26/08
BLANK	Benzene	71-43-2	< 1.0	n/a	ug/Kg						03/26/08
BLANK	4-Bromofluorobenzene(Surr)	460-00-4	52.480	105.000	% Recov	75.000	125.000				03/26/08
BLANK	Bromoform	75-25-2	< 1.0	n/a	ug/Kg						03/26/08
BLANK	Carbon disulfide	75-15-0	< 1.0	n/a	ug/Kg						03/26/08
BLANK	Carbon tetrachloride	56-23-5	< 1.0	n/a	ug/Kg						03/26/08
BLANK	Dibromochloromethane	124-48-1	< 1.0	n/a	ug/Kg						03/26/08
BLANK	Chloroform	67-66-3	< 1.0	n/a	ug/Kg						03/26/08
BLANK	Chlorobenzene	108-90-7	< 1.0	n/a	ug/Kg						03/26/08
BLANK	cis-1,3-Dichloropropene	10061-01-5	< 1.0	n/a	ug/Kg						03/26/08
BLANK	Chloroethane	75-00-3	< 1.0	n/a	ug/Kg						03/26/08
BLANK	1,2-Dichloroethane-d4(Surr)	17080-07-0	58.390	117.000	% Recov	75.000	125.000				03/26/08
BLANK	1,2-Dichloropropane	78-87-5	< 1.0	n/a	ug/Kg						03/26/08
BLANK	Ethylbenzene	100-41-4	< 1.0	n/a	ug/Kg						03/26/08
BLANK	Hexane	110-54-3	< 1.0	n/a	ug/Kg						03/26/08
BLANK	Bromonethane	74-83-9	< 1.0	n/a	ug/Kg						03/26/08
BLANK	Chloromethane	74-87-3	< 1.0	n/a	ug/Kg						03/26/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Organic

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: VOA Ground Water Protection

Sample Date:
 Receive Date:

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD	RPD(%)	RQ	Analysis Date
BLANK	2-Butanone	78-93-3	< 1.0	n/a	ug/Kg					U	03/26/08
BLANK	Methylenechloride	75-09-2	< 1.0	n/a	ug/Kg					U	03/26/08
BLANK	Tetrachloroethene	127-18-4	< 1.0	n/a	ug/Kg					U	03/26/08
BLANK	Styrene	100-42-5	< 1.0	n/a	ug/Kg					U	03/26/08
BLANK	Xylenes (total)	1330-20-7	< 1.0	n/a	ug/Kg					U	03/26/08
BLANK	Tetrahydrofuran	109-99-9	< 2.0	n/a	ug/Kg					U	03/26/08
BLANK	Toluene-d8(Surr)	2037-26-5	51.920	104.030	% Recov	80.000	126.000			U	03/26/08
BLANK	Toluene	108-88-3	< 1.0	n/a	ug/Kg					U	03/26/08
BLANK	trans-1,3-Dichloropropene	10061-02-6	< 1.0	n/a	ug/Kg					U	03/26/08
BLANK	Trichloroethene	79-01-6	< 1.0	n/a	ug/Kg					U	03/26/08
BLANK	Vinyl chloride	75-01-4	< 1.0	n/a	ug/Kg					U	03/26/08
LCS	1,1-Dichloroethene	75-35-4	27.130	109.000	% Recov	75.000	125.000			U	03/26/08
LCS	Benzene	71-43-2	27.060	108.000	% Recov	75.000	125.000			U	03/26/08
LCS	4-Bromofluorobenzene(Surr)	460-00-4	51.430	103.000	% Recov	75.000	125.000			U	03/26/08
LCS	Chlorobenzene	108-90-7	26.100	104.000	% Recov	75.000	125.000			U	03/26/08
LCS	1,2-Dichloroethane-d4(Surr)	17060-07-0	57.920	116.000	% Recov	75.000	125.000			U	03/26/08
LCS	Toluene-d8(Surr)	2037-26-5	51.700	103.000	% Recov	80.000	126.000			U	03/26/08
LCS	Toluene	108-88-3	28.580	106.000	% Recov	75.000	125.000			U	03/26/08
LCS	Trichloroethene	79-01-6	22.210	88.800	% Recov	75.000	125.000			U	03/26/08

WSCF**ANALYTICAL COMMENT REPORT**

Attention: Project Number	Steve Trent F08-043		Group #: WSCF20080561 Department: Organic
Sample #	Client ID	Lab Area	Test
		VALGROUP	Comment Organics: All results are corrected for moisture and reported on a dry weight basis. cgc

Lab Areas: VALGROUP - Group Validation VALTEST - Test Validation
LOGSAMP - Login for Sample LOGTEST - Login for Tests

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WPPC/5.2 Report #: WSCF20080561

Report Date: 7-may-2008

Page 1

WSCF

ANALYTICAL RESULTS REPORT

Attention: Steve Trent		SAF Number: F08-043		Group #: WSCF20080561						
Sample # W08GR00663		Client ID: B1TDD3		Department: Radiochemistry						
Client ID: B1TDD3		TRENT		Sample Received: 03/19/08						
Test Performed	CAS #	Method	RQ	Result	Unit					
				TP Err	Unit					
				DF						
				MDL	PQL					
				Analysis Date						
Americium by AEA										
Americium-241	14596-10-2	LA-508-471	0.260	pCi/g	1.00	0.048	04/08/08			
Am-243 tracer by AEA	AM243	LA-508-471	3.80	pCi/g	1.00	0.030	04/08/08			
Gamma Energy Analysis-grd H2O										
Cobalt-60	1D198-40-0	LA-508-481	U	-6.57e-04	pCi/g	+ -6.57e-03	pCi/g	03/20/08		
Cesium-137	10045-97-3	LA-508-481	2.13	pCi/g	+ -0.368	pCi/g	1.00	0.066	03/20/08	
Europium-152	14683-23-9	LA-508-481	U	-0.106	pCi/g	+ -0.199	pCi/g	1.00	0.30	03/20/08
Europium-154	15565-10-1	LA-508-481	U	-2.64e-03	pCi/g	+ -0.0264	pCi/g	1.00	0.13	03/20/08
Europium-155	14391-16-3	LA-508-481	U	0.0661	pCi/g	+ -0.538	pCi/g	1.00	0.88	03/20/08
Niobium-94	14681-63-1	LA-508-481	U	5.31e-03	pCi/g	+ -0.0330	pCi/g	1.00	0.057	03/20/08
Radium-226	13982-63-3	LA-508-481	0.471	pCi/g	+ -0.139	pCi/g	1.00	0.12	03/20/08	
Radium-228	15262-20-1	LA-508-481	0.632	pCi/g	+ -0.190	pCi/g	1.00	0.16	03/20/08	
Neptunium by AEA										
Neptunium-237	13994-20-2	LA-508-471	0.240	pCi/g	+ -0.0696	pCi/g	1.00	0.041	05/02/08	
Plutonium Isotopes by AEA										
Plutonium-238	13981-16-3	LA-508-471	0.0750	pCi/g	+ -0.0330	pCi/g	1.00	0.020	04/08/08	
Pu-239/240 by AEA	PU-239/240	LA-508-471	1.10	pCi/g	+ -0.297	pCi/g	1.00	5.9e-03	04/08/08	
Pu-242 tracer by AEA	PU242	LA-508-471	6.00	pCi/g			1.00	5.9e-03	04/08/08	
Sr-89/90										
Sr-89 Tracer by Beta Counting	SR-RAD	LA-508-415	1.20e+03	pCi/g	+ -144	pCi/g	1.00	0.40	03/31/08	
Sr-85 Tracer by Beta Counting	SR85	LA-508-415	89.0	Percent			1.00	0.0	03/31/08	
Uranium Isotopes by AEA										
Uranium-233/234	U-233/234	LA-508-471	0.560	pCi/g	+ -0.157	pCi/g	1.00	0.014	04/02/08	
Uranium-235	15117-96-1	LA-508-471	0.0380	pCi/g	+ -0.0220	pCi/g	1.00	0.020	04/02/08	
Uranium-238	U-238	LA-508-471	0.520	pCi/g	+ -0.151	pCi/g	1.00	5.3e-03	04/02/08	

D

- Analyte was identified at a secondary dilution factor (inorg)

U

- Analyzed for but not detected above limiting criteria (inorg)

U

- Analyzed for but not detected above limiting criteria (org)

U

- Indicates results that have NOT been validated;

+

- Indicates more than six qualifier symbols

+

Report WGPP/ver. 5.2

Groundwater Remediation Program

WSCF

ANALYTICAL RESULTS REPORT

Attention:	Steve Trent	Group #:	WSCF20080561
SAF Number:	F08-043	Department:	Radiochemistry
Sample #	W08GR00663	Sampled:	03/06/08
Client ID:	B1TDD3	Received:	03/19/08
	TRENT		
	WSCF		
Test Performed	CAS #	Method	RQ
U-232 tracer by AEA	U232	LA-508-471	4.00
		Result	Unit
		4.00	ppb/g
		TP Err	Unit
		DF	MDL
		1.00	0.039
		PQL	Analysis Date
			04/02/08

MDL = Minimum Detection Limit B - The analyte < the RDL but \geq the [DL]/MDL (inorg)

RQ = Result Qualifier

TP Err = Total Propagated Error

DF = Dilution Factor

D - Analyte was identified at a secondary dilution factor(inorg)

U - Analyzed for but not detected above limiting criteria(inorg)

U - Analyzed (or but not detected above limiting criteria.(org))

* - Indicates results that have NOT been validated: + - Indicates more than six qualifier symbols

Report WGPP/ver. 5.2

Groundwater Remediation Program

WSCF

TENTATIVELY IDENTIFIED PEAK REPORT

Attention: Steve Trent
Project Number F08-043

Group #: WSCF20080561
Department: Radiochemistry

Sample #	Client ID	Test Name	Peak Name	CAS#	RT	RQ	Result	Units
W08GR00663	B1TDD3	TRENT	Gamma Energy Analysis.grd H2O	Bi-214			0.54	pCi/g
W08GR00663	B1TDD3	TRENT	Gamma Energy Analysis.grd H2O	Bi-214 Count Error			31	%
W08GR00663	B1TDD3	TRENT	Gamma Energy Analysis.grd H2O	K-40			12	pCi/g
W08GR00663	B1TDD3	TRENT	Gamma Energy Analysis.grd H2O	K-40 Count Error			15	%
W08GR00663	B1TDD3	TRENT	Gamma Energy Analysis.grd H2O	PB-212			0.60	pCi/g
W08GR00663	B1TDD3	TRENT	Gamma Energy Analysis.grd H2O	PB-212 Count Error			36	%
W08GR00663	B1TDD3	TRENT	Gamma Energy Analysis.grd H2O	PB-214			0.61	pCi/g
W08GR00663	B1TDD3	TRENT	Gamma Energy Analysis.grd H2O	PB-214 Count Error			40	%
W08GR00663	B1TDD3	TRENT	Gamma Energy Analysis.grd H2O	TL-208			0.19	pCi/g
W08GR00663	B1TDD3	TRENT	Gamma Energy Analysis.grd H2O	TL-208 Count Error			48	%

RQ=Result Qualifier J - Analyte < lowest calibration but > = MOL.(org)

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Groundwater Remediation Program
 WGPPE v 5.2 Report: WSCF20080561 Report Date: 7-may-2008

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20080561

Matrix: SOLID
Test: Gamma Energy Analysis-grd H₂O

Sample Date: 03/06/08
Receive Date: 03/19/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD	RPD(%)	RQ	Analysis Date
Lab ID: W08GR0063											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Cobalt-60	10198-40-0	U2.317e-2		RPD	n/a	20.000	03/20/08			
DUP	Cesium-137	10045-97-3	2.357		RPD	10.071	20.000	03/20/08			
DUP	Europium-152	14683-23-9	U6.697e-2		RPD	n/a	20.000	03/20/08			
DUP	Europium-154	15585-10-1	U5.047e-2		RPD	n/a	20.000	03/20/08			
DUP	Europium-155	14391-16-3	U0.4628		RPD	n/a	20.000	03/20/08			
DUP	Niobium-94	14681-63-1	U-4.884e-3		RPD	n/a	20.000	03/20/08			
DUP	Radium-226	13982-63-3	0.4824		RPD	2.476	20.000	03/20/08			
DUP	Radium-228	15262-20-1			RPD	14.652	20.000	03/20/08			
BATCH QC											
BLANK	Cobalt-60	10198-40-0	U1.938e-3	n/a	pCi/g	-10.000	1000.000	03/24/08			
BLANK	Cesium-137	10045-97-3	U-1.486e-3	n/a	pCi/g	-10.000	1000.000	03/24/08			
BLANK	Europium-152	14683-23-9	U-2.787e-3	n/a	pCi/g	-10.000	1000.000	03/24/08			
BLANK	Europium-154	15585-10-1	U-1.214e-2	n/a	pCi/g	-10.000	1000.000	03/24/08			
BLANK	Europium-155	14391-16-3	U-3.258e-4	n/a	pCi/g	-10.000	1000.000	03/24/08			
BLANK	Niobium-94	14681-63-1	U1.757e-3	n/a	pCi/g	-10.000	1000.000	03/24/08			
BLANK	Radium-226	13982-63-3	0.1314	0.131	pCi/g	-10.000	1000.000	03/24/08			
BLANK	Radium-228	15262-20-1	7.331e-2	0.073	pCi/g	-10.000	1000.000	03/24/08			
LCS	Cobalt-60	10198-40-0	10250	103.119	% Recov	80.000	120.000	03/24/08			
LCS	Cesium-137	10045-97-3	6430	106.457	% Recov	80.000	120.000	03/24/08			

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: Americium by AEA

Sample Date: 03/06/08
 Receive Date: 03/19/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD	RPD(%)	RQ	Analysis Date
Lab ID: W08GR00663											
DUP	Americium-241	14596-10-2	0.29								04/08/08
DUP	Am 243 tracer by AEA	AM243	3.862	95.500	RPD	30.000	10.909	20.000	10.909	20.000	04/08/08
SURR	Am-243 tracer by AEA	AM243	3.84	84.640	% Recov	30.000	105.000	105.000	105.000	105.000	04/08/08
BATCH QC											
BLANK	Americium-241	14596-10-2	U4.1e-3	n/a	pCi/g	-10.000	1000.000				04/08/08
BLANK	Am-243 tracer by AEA	AM243	4.024	75.730	% Recov	30.000	105.000				04/08/08
LCS	Americium-241	14596-10-2	11.3	95.359	% Recov	80.000	120.000				04/08/08
LCS	Am-243 tracer by AEA	AM243	11.17	86.910	% Recov	30.000	105.000				04/08/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: Neptunium by AEA

Sample Date: 03/06/08
 Receive Date: 03/19/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR00663												
BATCH QC ASSOCIATED WITH SAMPLE												
DUP	Neptunium-237	13994-20-2	0.3									
MS	Neptunium-237	13994-20-2	100.6	100.600	RPD	75.000	125.000	22.222	25.000	05/02/08		
MSD	Neptunium-237	13994-20-2	100.6	100.600	% Recov	75.000	125.000			05/02/08		
SFK RPD	Neptunium-237	13994-20-2	100.600		% RPD			0.000	20.000		05/02/08	
Lab ID: W08GR00694												
BATCH QC ASSOCIATED WITH SAMPLE												
MS	Neptunium-237	13994-20-2	100.4	100.400								
MS	Neptunium-237	13994-20-2			% Recov	75.000	125.000				05/02/08	
Lab ID: W08GR00695												
BATCH QC ASSOCIATED WITH SAMPLE												
MS	Neptunium-237	13994-20-2	99.2	99.200								
BATCH QC												
BLANK	Neptunium-237	13994-20-2	2e-2	0.020	pCi/G	-10.000	1000.000				05/02/08	
LCS	Neptunium-237	13994-20-2	13.12	102.942	% Recov	80.000	120.000				05/02/08	

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: Plutonium Isotopes by AEA

Sample Date: 03/06/08
 Receive Date: 03/19/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD	RPD(%)	RQ	Analysis Date
Lab ID: W08GR00663											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Plutonium-238	13981-16-3	U2.1E-2		RPD			n/a	20 000		04/08/08
DUP	Pu-239/240 by AEA	PU-239/240	1		RPD			9.524	20.000		04/08/08
DUP	Pu-242 tracer by AEA	PU242	5.985	82.370	% Recov	30.000	105.000				04/08/08
SURR	Pu-242 tracer by AEA	PU242	5.95	70.880	% Recov	30.000	105.000				04/08/08
BATCH QC											
BLANK	Plutonium-238	13981-16-3	U-9.8E-3		n/a	pCi/g	-10.000	1000.000			04/08/08
BLANK	Pu-239/240 by AEA	PU-239/240	U2E-3		n/a	pCi/g	-10.000	1000.000			04/08/08
BLANK	Pu-242 tracer by AEA	PU242	6.236		90.880	% Recov	30.000	105.000			04/08/08
LCS	Pu-239/240 by AEA	PU-239/240	12.62	98.248	% Recov	80.000	120.000				04/08/08
LCS	Pu-242 tracer by AEA	PU242	17.3	89.610	% Recov	30.000	105.000				04/08/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: Strontium 89/90

Sample Date: 03/06/08
 Receive Date: 03/19/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD(%)	RPD Limit	RQ	Analysis Date
Lab ID: W08GR00663											
BATCH QC ASSOCIATED WITH SAMPLE											
DUP	Sr-85 Tracer by Beta Counting	SR85	90.3	90.300	% Recov	30.000	105.000				03/31/08
DUP	Strontium-89/90	SR-RAD	1.4E+03		RPD						03/31/08
SURR	Sr-85 Tracer by Beta Counting	SR85	89.0	89.000	% Recov	30.000	105.000				03/31/08
BATCH QC											
BLANK	Sr-85 Tracer by Beta Counting	SR85	81	81.000	% Recov	30.000	105.000				03/31/08
BLANK	Strontium-89/90	10098-97-2	U1.8E-01	n/a	pCi/g	-10.000	300.000				03/31/08
LCS	Sr-85 Tracer by Beta Counting	SR85	87.7	87.700	% Recov	30.000	105.000				03/31/08
LCS	Strontium-89/90	10098-97-2	64.8	92.178	% Recov	80.000	120.000				03/31/08

WSCF ANALYTICAL LABORATORY QC REPORT

Department: Radiochemistry

SDG Number: WSCF20080561
 Matrix: SOLID
 Test: Uranium Isotopes by AEA

Sample Date: 03/06/08
 Receive Date: 03/19/08

QC Type	Analyte	CAS #	QC Found	QC Yield	Units	Lower Limit	Upper Limit	RPD	RPD(%)	RQ	Analysis Date
Lab ID: W08GR00663											
DUP	U-232 tracer by AEA	U232	3.975	91.030	% Recov	30.000	105.000	RPD	7.407	20.000	04/02/08
DUP	Uranium-233/234	U.233/234	0.52		RPD	RPD	7.595	20.000	04/02/08	04/02/08	04/02/08
DUP	Uranium-235	15117-96-1	4.1e-2		RPD	RPD	12.245	20.000	04/02/08	04/02/08	04/02/08
DUP	Uranium-238	U.238	0.46		% Recov	30.000	105.000				04/02/08
SURR	U-232 tracer by AEA	U232	3.953	82.960							
BATCH QC											
BLANK	U-232 tracer by AEA	U232	4.142	B2.650	% Recov	30.000	105.000	pCi/g	-10.000	1000.000	04/02/08
BLANK	Uranium-233/234	13966-29-5	1.6e-2	0.016	pCi/g	-10.000	1000.000				04/02/08
BLANK	Uranium-235	15117-96-1	6.5e-3	0.006	pCi/g	-10.000	1000.000				04/02/08
BLANK	Uranium-238	24678-82-8	U2e-3	n/a	pCi/g	-10.000	1000.000				04/02/08
LCS	U-232 tracer by AEA	U232	11.5	72.160	% Recov	30.000	105.000				04/02/08
LCS	Uranium-233/234	13966-29-5	N/A	n/a	% Recov	75.000	125.000				04/02/08
LCS	Uranium-235	15117-96-1	N/A	n/a	% Recov	75.000	125.000				04/02/08
LCS	Uranium-238	24678-82-8	19	100.237	% Recov	80.000	120.000				04/02/08

M4W41-SLF-08-491

ATTACHMENT 4

SAMPLE RECEIPT INFORMATION

Consisting of 6 pages
Including cover page

Waste Sampling and Characterization Facility
 P.O. BOX 1970 S3-30, Richland, WA 99352
 PHONE: (509) 373-7004/FAX: (509) 373-7134

ACKNOWLEDGMENT OF SAMPLES RECEIVED

Groundwater Remediation Program

Richland, WA 99354
 Attn: Steve Trent

Customer Code: GPP
 PO#: 123215/ES20
 Group#: 20080561
 Project#: F08-043
 Proj Mgr: Steve Trent E6-35
 Phone: 373-5869

The following samples were received from you on 03/19/08. They have been scheduled for the tests listed beside each sample. If this information is incorrect, please contact your service representative. Thank you for using Waste Sampling and Characterization Facility.

Sample#	Sample Id	Tests Scheduled	Matrix	Sample Date
W08GR00663	B1TDD3	TRENT @2008 @GEA-GPP PERSOLID	Solid, or handle as if solid @AEA-30 @AEA-31 @AEA-32 @AEA-33 @IC-30 @PCBGPP @SR89_90 @SVOCGPP @TPHD	03/06/08
W08GR00664	B1TDD2	TRENT	Solid, or handle as if solid	03/06/08
W08GR00665	B1TDD1	TRENT @VOA-GPP	Solid, or handle as if solid	03/06/08

Test Acronym Description

Test Acronym	Description
@2008	ICP-200.8 MS All possible meta
@AEA-30	Plutonium Isotopics by AEA
@AEA-31	Americium by AEA
@AEA-32	Uranium Isotopics by AEA
@AEA-33	Neptunium by AEA
@GEA-GPP	Gamma Energy Analysis-grd H2O
@IC-30	Anions by Ion Chromatography
@PCBGPP	PCBs complete list
@SR89_90	Strontium 89/90
@SVOCGPP	SW-846 8270C Semi-Vols
@TPHD-WA	NWTPH-D TPH Diesel Range (Wa)
@VOA-GPP	VOA Ground Water Protection
PERSOLID	Percent Solids

COLLECTOR NCO Sampler	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR WDRIG, DL	PRICE CODE BN
SAMPLING LOCATION CS941, 1-004	PROJECT DESIGNATION 216-A-30 Crib Sampling	SAF NO. F08-043	AIR QUALITY <input type="checkbox"/>	45 Days / 45 Days
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH 15' 6" - 14' 1"	COA 123215ES20	METHOD OF SHIPMENT GOVERNMENT VEHICLE
OFFSITE PROPERTY NO.		BILL OF LADING/AIR BILL NO.		
Waste Sampling & Characterization				
MATRIX	POSSIBLE SAMPLE HAZARDS / REMARKS		PRESERVATION	
A=Air Dl=Drum Liquids DS=Drum Solids L=Liquid O=Oil Se=Soil Sc=Sediment Te=Tissue V=Vegetation W=Water Wi=Wipe X=Other	Contains Radioactive Material at concentrations that are not regulated for transport per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		TYPE OF CONTAINER ag	Cool-4C Cool-4C Cool-4C Cool-4C
		NO. OF CONTAINER(S) 1	ag 1 1	g/p 1 1 1 1
		VOLUME 120mL	120mL	Square Bottle - Poly Bottle - Poly Square
		SAMPLE ANALYSIS		SEE ITEM (1) IN SPECIAL INSTRUCTIONS SEE ITEM (2) IN SPECIAL INSTRUCTIONS SEE ITEM (3) IN SPECIAL INSTRUCTIONS SEE ITEM (4) IN SPECIAL INSTRUCTIONS SEE ITEM (5) IN SPECIAL INSTRUCTIONS
SPECIAL HANDLING AND/OR STORAGE Radioactive tie to B1TDB6				
SAMPLE NO. B1TDD3 W00800063	MATRIX SOIL	SAMPLE DATE 3-6-09	SAMPLE TIME 10:45	
<i>Lot # 024875</i>				
CHAIN OF POSSESSION	SIGN / PRINT NAMES	SPECIAL INSTRUCTIONS		
RELINQUISHED BY/REMOVED FROM <i>Chris Furtach</i> RELINQUISHED BY/REMOVED FROM <i>No - 509 R-14/4</i>	RECEIVED BY/STORED IN <i>Ed Hart</i>	** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GKI applies to this SAF.		
RELINQUISHED BY/REMOVED FROM <i>Ed Hart</i>	RECEIVED BY/STORED IN <i>T A Fraizer</i>	(4) Semi-VOA - B270B (Add-On) {1,2,4-Trimethylbenzene, Tributyl phosphate}		
RELINQUISHED BY/REMOVED FROM <i>Ed Hart</i>	RECEIVED BY/STORED IN <i>Ed Hart</i>	(4) TPH-Diesel/Kerosene Range - WTPH-D (Total petroleum hydrocarbons - diesel range, Total petroleum hydrocarbons - kerosene range)		
RELINQUISHED BY/REMOVED FROM <i>Ed Hart</i>	RECEIVED BY/STORED IN <i>Ed Hart</i>	(3) ICP/MS - 200.8 (TA) {Barium, Cadmium, Chromium, Copper, Nickel, Silver, Zinc}		
RELINQUISHED BY/REMOVED FROM <i>Ed Hart</i>	RECEIVED BY/STORED IN <i>Ed Hart</i>	(3) ICP/MS - 200.8 (Add-on) {Arsenic, Beryllium, Lead, Selenium} 200.8_HG - ICPMS;		
RELINQUISHED BY/REMOVED FROM <i>Ed Hart</i>	RECEIVED BY/STORED IN <i>Ed Hart</i>	(4) IC Anions - 300.0 {Fluoride, Nitrogen In Nitrate, Nitrogen In Nitrite, Sulfate}		
RELINQUISHED BY/REMOVED FROM <i>Ed Hart</i>	RECEIVED BY/STORED IN <i>Ed Hart</i>	(5) Gamma Spectroscopy {Cesium-137 Cobalt-60, Europium-152, Europium-154, Europium-155, Radium-226} Gamma Spec - Add-on {Niumbium-94, Radium-228}		
RELINQUISHED BY/REMOVED FROM <i>Ed Hart</i>	RECEIVED BY/STORED IN <i>Ed Hart</i>	(6) Isotopic Uranium; Neptunium-237; Strontium-89,90 -- Total Sr; Isotopic Plutonium; Americium-241 (Americium-241)		
LABORATORY SECTION	RECEIVED BY	DATE/TIME	DATE/TIME	DATE/TIME
FINAL SAMPLE DISPOSITION				

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A-6003-618(01/06)

COLLECTOR NCO Sampler	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR WDRIG, DL	PRICE CODE 6N	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C5941, I-004	PROJECT DESIGNATION 216-A-30 Crib Sampling	ACTUAL SAMPLE DEPTH 15 ft - N.	SAF NO. F08-043	AIR QUALITY <input type="checkbox"/>	METHOD OF SHIPMENT GOVERNMENT VEHICLE
ICE CHEST NO.	FIELD LOGBOOK NO.	COA 12315ES20	BILL OF LADING/AIR BILL NO. N/A		
SHIPPED TO Waste Sampling & Characterization					
SAMPLE NO. B1TDD2		MATRIX* SOIL	SAMPLE DATE 3-16-08	SAMPLE TIME 1045	SIGN/ PRINT NAMES Lot # 6215060
POSSIBLE HAZARDS / REMARKS Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)		PRESERVATION Cool-4C	TYPE OF CONTAINER aGS*	NO. OF CONTAINER(S) 1	SPECIAL INSTRUCTIONS SEE ITEM (U) IN SPECIAL INSTRUCTIONS
SPECIAL HANDLING AND/OR STORAGE Radioactive tie to B1TB6		VOLUME 40mL			
CHAIN OF POSSESSION					
RELINQUISHED BY/REMOVED FROM JCS Full	DATE/TIME 3-18-08 1145	RECEIVED BY/STORED IN No Soil Vials	DATE/TIME 3-6-08 1145	SPECIAL INSTRUCTIONS ** The 200 Area S&GRP Characterization and Monitoring Sampling and Analysis GR1 applies to this SAF.	
RELINQUISHED BY/REMOVED FROM MDO SDS Frazier	DATE/TIME 0705	RECEIVED BY/STORED IN El Paso, TX	DATE/TIME 3-15-08 0705	(1) VOA - 5035(B260 (TCL); VOA - 5035(B260 - (Add-On) {Acetonitrile, Hexane, Tetrahydrofuran})	
RELINQUISHED BY/REMOVED FROM El Paso, TX	DATE/TIME 3-18-08 0730	RECEIVED BY/STORED IN TA Frazier El Paso, TX	DATE/TIME 3-17-08 0700		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN	DATE/TIME		
LABORATORY SECTION	RECEIVED BY	DATE/TIME	DISPOSED BY	DATE/TIME	
FINAL SAMPLE DISPOSITION	DISPOSAL METHOD				

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COLLECTOR NCO Sampler	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR WDRIG, DL	PRICE CODE SN
SAMPLING LOCATION CS941, I-004	PROJECT DESIGNATION 216-A-30 Crib Sampling	SAF NO. P08-043	AIR QUALITY <input type="checkbox"/>	DATA TURNAROUND 45 Days / 45 Days
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH 15.6 - 19.1'	METHOD OF SHIPMENT GOVERNMENT VEHICLE	
SHIPPED TO Waste Sampling & Characterization	OFFSITE PROPERTY NO. N/A	BILL OF LADING/AIR BILL NO. N/A		
MATRIX* A=Air DL=Drum Liquids DS=Drum Solids L=Liquid O=Oil S=Soil SE=Sediment T=Tissue V=Vegetation W=Water X=Other	POSSIBLE HAZARDS/ REMARKS Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOT Order 5400.5 (1990/1993)	PRESERVATION Cool <7°C and MED/Cond-4 >20C	TYPE OF CONTAINER ags* ags*	NO. OF CONTAINER(S) 5
SPECIAL HANDLING AND/OR STORAGE Radioactive tie to 81-TD86		SAMPLE ANALYSIS SEE ITEM (1) IN SPECIAL INSTRUCTIONS	SAMPLE TIME 3-6-08 1045	
SAMPLE NO. B1TDD1	MATRIX SOIL 665	SAMPLE DATE 3-6-08	SAMPLE TIME 1045	SPECIAL INSTRUCTIONS SEE PAGE 2 FOR ALL SPECIAL INSTRUCTIONS
SIGN/ PRINT NAMES Lot # 6215860				
CHAIN OF POSSESSION				
RELINQUISHED BY/REMOVED FROM Chris Suther	DATE/TIME 3-19-08 1145	RECEIVED BY/STORED IN NO Soa Frdg	DATE/TIME 3-6-08 1145	
RELINQUISHED BY/REMOVED FROM Mo 509 Fridge	DATE/TIME 3-19-08 0705	RECEIVED BY/STORED IN Karen/ Lab	DATE/TIME 3-19-08 0705	
RELINQUISHED BY/REMOVED FROM Ez Karen/ Lab	DATE/TIME 3-19-08 0720	RECEIVED BY/STORED IN Lew	DATE/TIME 3-19-08 0720	
RELINQUISHED BY/REMOVED FROM RELINQUISHED BY/REMOVED FROM RELINQUISHED BY/REMOVED FROM	DATE/TIME	RECEIVED BY/STORED IN RECEIVED BY/STORED IN RECEIVED BY/STORED IN	DATE/TIME DATE/TIME DATE/TIME	
LABORATORY SECTION FINAL SAMPLE DISPOSITION	RECEIVED BY DISPOSAL METHOD	TITLE DISPOSED BY	DATE/TIME DATE/TIME	

ICED

Fluor Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				PAGE 2 OF 2
COLLECTOR NCO Sampler	COMPANY CONTACT TRENT, SJ	TELEPHONE NO. 373-5869	PROJECT COORDINATOR WIDRIG, DL	PRICE CODE SA	AIR QUALITY <input type="checkbox"/>	DATA TURNAROUND 45 Days / 45 Days
SAMPLING LOCATION C591, T-004	PROJECT DESIGNATION 216-A-30 Ctd Sampling		SAF NO. F08-043			
ICE CHEST NO.	FIELD LOGBOOK NO.	ACTUAL SAMPLE DEPTH	COA 12321SES20	METHOD OF SHIPMENT GOVERNMENT VEHICLE		
SHIPPED TO Waste Sampling & Characterization	OFF SITE PROPERTY NO. N/A			BILL OF LADING/AIR BILL NO.		
SPECIAL INSTRUCTIONS	<p>** The 200 Area SICRP Characterization and Monitoring Sampling and Analysis SGI applies to this SAF.</p> <p>** Analytical batch QC must be run on a sample associated with this SAF.</p> <p>** All VOA samples will be collected using EPA Method 5035A.</p> <p>** VOA sample bottle sets will include 3 bottles for high level analysis, 5 bottles for low level analysis, and 1 methanol process control sample.</p> <p>** The laboratory is to use one of the low level VOA bottles for moisture content determination.</p> <p>** VOA bottles will be labeled with an appended suffix of K, L, M, N, or P for low level and W, X, Y or Z for high level. These suffixes are for the purpose of providing bottle weights to the laboratories. These suffixes should not be included as part of the sample ID reported in the final data packages.</p> <p>{(1)VOA - 5035/8260 (LOW LEVEL); VOA - 5035/8260 (LOW LEVEL) - (Add-On) {Acetonitrile, Hexane, Tetrahydrofuran}} {(2)VOA - 5035/8260 (HIGH LEVEL); VOA - 5035/8260 (HIGH LEVEL) - (Add-On) {Acetonitrile, Hexane, Tetrahydrofuran}}</p>					

ICED

M4W41-SLF-08-491

ATTACHMENT 5

SAMPLE RECORD SHEET

Consisting of 2 pages
Including cover page

CS941

I-004

SAMPLE RECORD SHEET

Sample Number	Sample Suffix ¹	Empty Weight ² (g)	Weight with Sample ³ (g)	Weight of Sample ⁴ (g)	Methanol Added (g)	Methanol Added (mL)	Weight of Methanol and Sample
BITDD1	K	31.5	37.3	5.8	---	---	---
	L	31.4	37.1	5.7	---	---	---
	M	31.8	36.6	4.8	---	---	---
↓	N	31.4	37.0	5.6	---	---	---
↓	P	31.1	35.5	4.4	---	---	---
BITDD2		30.0	30.0	0	4.0	5.0 mL	34.0
BITDD1	W	30.1	34.6	4.5	3.9	5.0 mL	38.5
↓	X	30.1	36.1	6.0	5.2	6.5 mL	41.3
↓	Y	30.3	36.3	6.0	5.3	6.5 mL	41.6

¹Sample suffix of L, K, M, N and P relate to low-level concentration samples and will not have any preservation beyond freezing between -7C and -20C.

Sample suffix of W, X, and Y relate to methanol preservation for high-level samples.

²Empty weight is to include all labels, stickers, bags, and anything else that will be associated with the bottle when it is weighed with the sample.

³Ensure that everything weighed for the empty bottle and no additional items (besides the sample) is weighed

⁴Sample weight is the vial with sample minus the vial empty

$$\text{Depth} = 15.6' - 18.1' \text{ Bgs}$$

Fisher Methanol used for preservation
VOA's could possibly be compromised
Do to time issues.

Read and Understood By

Signed

3-6-08

Date

Signed

3-12-08

Date

Problems and Discrepancies

SDG WSCF20080561

WSCF
May 27, 2008

1. The data package received is missing 1, 2, 4-Trimethylbenzene. Please add the missing data and reissue the hardcopy data package.

WSCF Response

Laboratory error has been corrected and data package has been reissued.